CLINICAL AND RADIOGRAPHIC SUCCESS OF THREE PULPOTOMY PROCEDURES IN PRIMARY TEETH – A RANDOMIZED CONTROLLED CLINICAL TRIAL

ABSTRACT

Aim:

The aim of the study was to evaluate and compare the clinical and radiographic success of diode laser, ferric sulphate and formocresol pulpotomies in primary teeth at 3 and 6 months follow up.

Materials and Methods:

A total of 60 primary molars in 40 children were selected according to inclusion and exclusion criteria. These sixty teeth were divided into three equal groups (N=20) and received diode laser, ferric sulphate and formocresol pulpotomies in the respective groups. Clinical and radiographic evaluations were done by two calibrated pediatric dentists after three months and six months.

Results:

In 6 months, clinical success of diode laser, ferric sulphate and formocresol were 96%, 94.7%, 100% respectively and radiographic success were 96%, 92.3%, 96.8% respectively. The overall success of diode laser, ferric sulphate and formocresol were 94.5%, 94.5%, 98.4% respectively. There was no statistically significant difference between the overall success of three pulpotomy procedures ($p \leq 0.05$)

Conclusions:

Diode laser and ferric sulphate pulpotomy can be used as an alternative to the gold standard pulpotomy agent, formocresol.

Keywords

Pulpotomy, Diode laser, Ferric sulphate, Formocresol